SECRET
Approved For Release 2003/08/05 : CIA-RDP78B05171A000300010015-0

NPIC/TSSG/RED-121-70
14 April 1970

MEMORANDUM FOR: Chief, Reconnaissance Systems Branch, RED/TSSG/NPIC
Chief, Advanced Technology Branch, RED/TSSG/NPIC
Chief, Systems Research Branch, RED/TSSG/NPIC
Chief, Systems Development Branch, RED/TSSG/NPIC

SUBJECT : SO-242 Color Film and Related Lens Performance Information

During the CCB sponsored briefing concerning the subject presented

25X1

by [redacted] several briefing aids were used which contain information that may be of interest to you. I have made copies of these and forward them herewith for your information. If you have any questions about their significance, please do not hesitate to contact me in that regard.

25X1

[redacted]
Special Assistant for Plans & Applications, RED

Distribution:
1 - TSSG/RED/RSB
1 - TSSG/RED/ATB
1 - TSSG/RED/SRB
1 - TSSG/RED/SDB
1 - TSSG/RED
1 - TSSG/RED/SA

Declass Review by
NIMA/DOD

Approved For Release 2003/08/05 : CIA-RDP78B05171A000300010015-0
SECRET
MAJOR 1
Excluded from automatic downgrading and declassification

Approved For Release 2003/08/05 : CIA-RDP78B05171A000300010015-0

70-200

3

COLOR

SY

25X1

IDENT

COLOR

DATE 4/1/70

REV.

CHARACTERISTICS OF COLOR AERIAL FILMS

TYPE	RESOLVING POWER 1000:1	1.7:1	COMMENTS
SO-242 REVERSAL	194	110	3404 HOMOLOGUE
SO-180 IR REVERSAL	95	36	OBSOLETE
SO-360 REVERSAL	125	65	AERIAL DUPE
7271 INTERNEG	255	150	MOTION PICTURE
7380 POS PRINT	560	280	MOTION PICTURE

Approved For Release 2003/08/05 : CIA-RDP78B05171A000300010015-0

12-69 GRAPHIC SERVICES

Approved For Release 2003/08/05 : CIA-RDP78B05171A000300010015-0

METHODS OF REPRODUCTION OF SO-242
SUBJECTIVELY RANKED IN ORDER OF PREFERENCE

12X SO-360 > 1X SO-360 > 6X SO-360 > 4X SO-360

12X SO-360 > 12X 7380 CONTACT PRINTED FROM 12X 7271

12X SO-360 > 12X 7380 ENLARGED FROM 1X 7271

1X SO-360 ≅ 1X 7380 FROM 1X 7271

ORIGINAL SO-242 ≅ 12X SO-360

25X1

COLOR

IDENT

COLOR

DATE 4/2/70

REV.

Approved For Release 2003/08/05 : CIA-RDP78B05171A000300010015-0

12-69 GRAPHIC SERVICES

Approved For Release 2003/08/05 : CIA-RDP78B05171A000300010015-0

CONCLUSIONS

USING AVAILABLE SO-242 SAMPLES

- 1X CONTACT PRINTS ON SO-360 SHOW A SIGNIFICANT LOSS
- 12X ENLARGEMENTS ON SO-360 DO NOT SHOW A SIGNIFICANT LOSS
- ENLARGING LENS QUALITY FOR FUTURE HARDWARE SHOULD EXCEED THE ABOVE 12X LENS (220 LINES/MM)

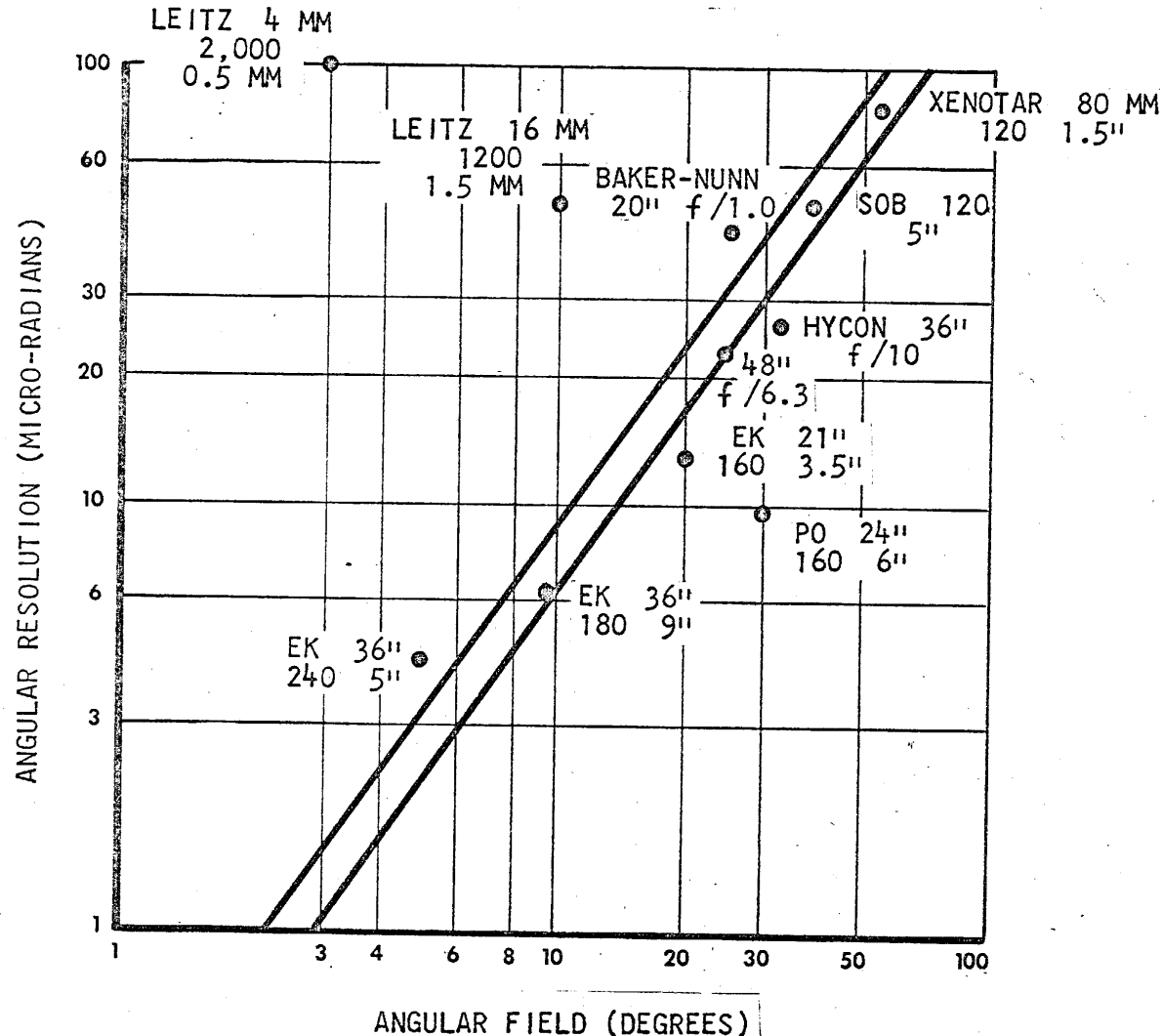
25X1

Approved For Release 2003/08/05 : CIA-RDP78B05171A000300010015-0

70-211

Approved For Release 2003/08/05 : CIA-RDP78B05171A000300010015-0

TELEPHOTO LENS DATA



Approved For Release 2003/08/05 : CIA-RDP78B05171A000300010015-0

12-69
GRAPHIC SERVICES

Approved For Release 2003/08/05 : CIA-RDP78B05171A000300010015-0

16

COLOR

25X1

IDENT

COLOR

DATE 4/4/70

REV.

BPE LENSES

LENS	EF (MM)	MAG	FIELD ANGLE	FIELD DIA. AT NEG (MM)	C/MM	BAND WIDTH
A	270	5	18	85	89	8000
B	182	10	28	90	127	11000
C	122	15	36	80	226	18000
D	77	25	36	50	372	18000
E	48	40	36	31	465	14000
F	31	60	36	20	660	13000
G	20	100	35	13	741	10000
H	13	150	36	8	828	7000

Approved For Release 2003/08/05 : CIA-RDP78B05171A000300010015-0

12-69
GRAPHIC SERVICES

Approved For Release 2003/08/05 : CIA-RDP78B05171A000300010015-0

25X1

TRANSMITTAL SLIP	DATE
TO: ~~C/SRB/RED~~ [illegible]	
ROOM NO.	BUILDING

[redacted]

for your retention

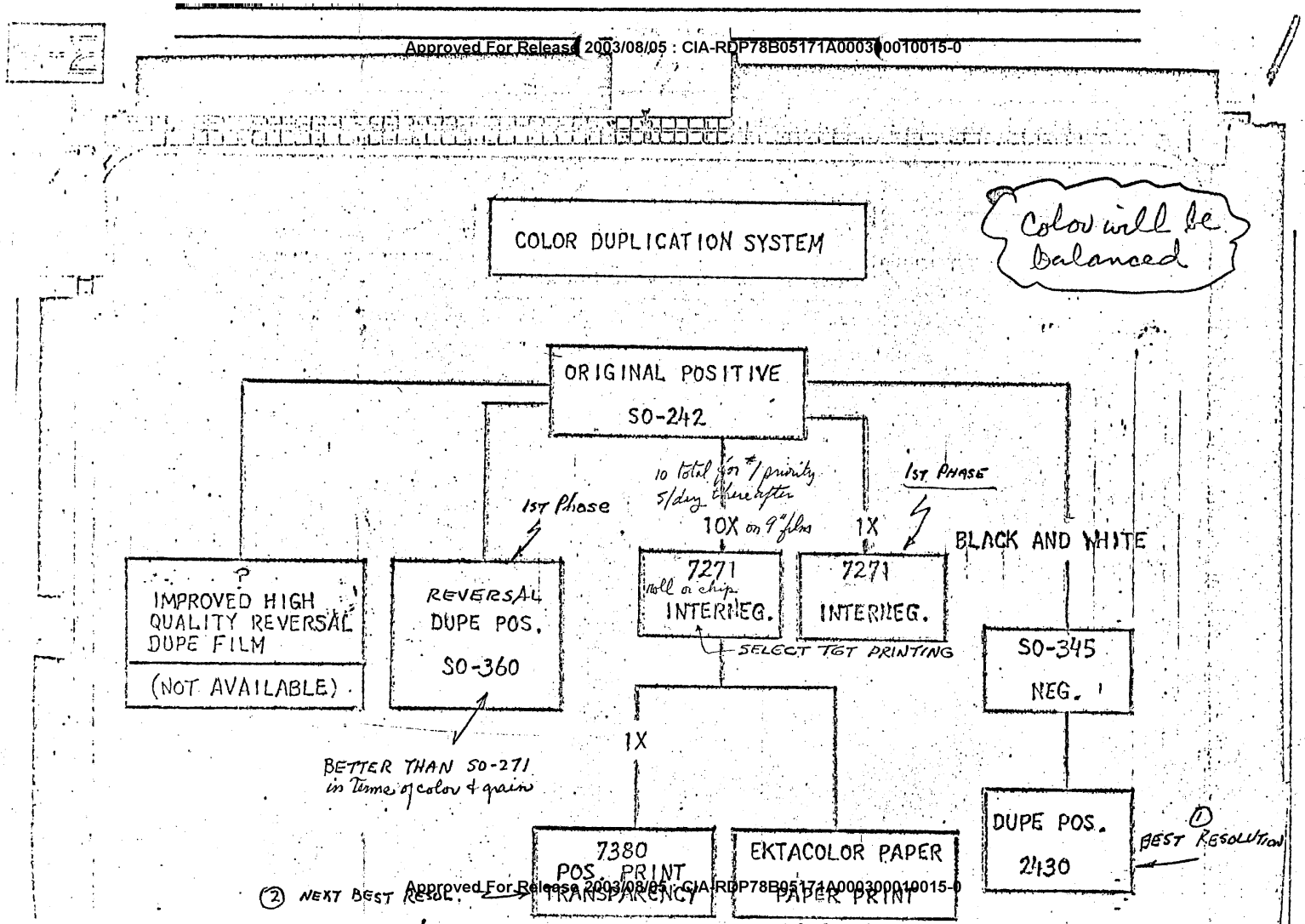
Ala
May 1978

FROM: ~~RED/SA/P&A~~ [illegible]		
ROOM NO.	BUILDING	EXTENSION

FORM NO. 241 REPLACES FORM 36-8 WHICH MAY BE USED. (47)
1 FEB 55

Approved For Release 2003/08/05 : CIA-RDP78B05171A000300010015-0

Approved For Release 2003/08/05 : CIA-RDP78B05171A000300010015-0



Approved For Release 2003/08/05 : CIA-RDP78B05171A000300010015-0